

DRAFT

MEPA/NEPA/HB495 GENERIC CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action Reservoir Rehabilitation using Rotenone
2. Agency Authority for the Proposed Action MAC 87-3-206 - Use of poison to control undesirable fish A87-1-201, MCA, et seq and 87-3-206, MCA. @
3. Name of Project Hubbard Reservoir Rehabilitation
4. Name, Address and Phone Number of Project Sponsor (if other than the agency)
Fisheries Biologist Ladd Knotek (406) 751-4542
Montana Fish, Wildlife & Parks
490 N. Meridian Rd.
Kalispell, MT 59901

5. If Applicable:

Estimated Construction/Commencement Date September/October 1997
Estimated Completion Date October/December 1997
Current Status of Project Design (% complete) N/A

NOTE: Timing of this project is dependent on water levels. If reservoir levels are too high in 1997, we will pursue in 1998.

6. Location Affected by Proposed Action (county, range and township)

Flathead Co., T25, 26N; R24, 25W; Sec. 5, 6, 7, 8, 18

7. Project Size: Estimate the number of acres that would be directly affected that are currently:

(a) Developed:
residential . . . __ acres
industrial . . . __ acres

(b) Open Space/Woodlands/
Recreation . . . __ acres

(c) Wetlands/Riparian
Areas __ acres

(d) Floodplain __ acres

(e) Productive:
irrigated cropland . . . __ acres
dry cropland __ acres
forestry __ acres
rangeland __ acres
other 483 acres
Reservoir at full pool

8. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

Map Attached

9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.

Treat Hubbard Reservoir with rotenone (maximum concentration 2ppm) to remove yellow perch and other undesirable species to re-establish a productive salmoind fishery. The reservoir will be treated in the fall at the lowest water levels possible. Rotenone will detoxify prior to thaw the following spring and any outflow water will be detoxified to prevent fish mortality downstream. Instream flow requirements downstream of the reservoir will be accommodated. Hatchery plants have been discontinued until after rehabilitation.

10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

<u>Agency Name</u>	<u>Permit</u>	<u>Date Filed/#</u>
Montana Department of Environmental Quality	Discharge Permit for Rotenone	Pending
Montana Department of of Agriculture	Applicator's License - Rotenone	1997/1-07-14689-15

(b) Funding:

<u>Agency Name</u>	<u>Funding Amount</u>
Bonneville Power Administration/FWP	\$25,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
Confederated Salish and Kootenai Tribes	Downstream Fisheries

11. List of Agencies Consulted During Preparation of the EA:
Confederated Salish and Kootenai Tribes
Flathead Irrigation Project
Plumb Creek Timber Company
Montana Department of Environmental Quality

PART II. ENVIRONMENTAL REVIEW

A. Evaluation of the Impacts of the Proposed Action Including Secondary and Cumulative Impacts on the Physical and Human Environment:

PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Soil instability or changes in geologic substructure?		x				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		x				
c. Destruction, covering or modification of any unique geologic or physical features?		x				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		x				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT

2. AIR Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Emission of air pollutants or deterioration of ambient air quality?		x				
b. Creation of objectionable odors?			x		Yes	2b.
c. Alteration of air movement, moisture or temperature patterns, or any change in climate, either locally or regionally?		x				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		x				
e. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):
 2b. Petroleum carrier for Rotenone has an objectionable odor, but impacts are minimal and short term due to the dilution of the compound, short active life, and timing of application (just prior to ice formation). Objectionable odors may also result from fish decomposition, but application will occur in cold water temperatures (slowing decomposition), human use of the lake is minimal in fall and predators will consume many of the dead fish.

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

PHYSICAL ENVIRONMENT (continued)

3. <u>WATER</u> Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, turbidity or pathogens?			x		Yes	3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?		x				
c. Alteration of the course or magnitude of flood water or other flows?			x		Yes	3c.
d. Changes in the amount of surface water in any water body or creation of a new water body?			x		Yes	3d.
e. Exposure of people or property to water related hazards such as flooding?		x				
f. Changes in the quality of groundwater?		x				
g. Changes in the quantity of groundwater?		x				
h. Increase in the risk of contamination of surface or groundwater?		x				
i. Violation of the Montana Non Degradation Statute?		x				
j. Effects on any existing water right or reservation?		x				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?		x				
l. Effects on other users as a result of any alteration in surface or groundwater quantity?			x		Yes	3l.
m. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

3a. Rotenone will be distributed throughout reservoir and is lethal to gill-breathing organisms. At the levels used, fish will be killed and aquatic insects will be reduced, but not eliminated. Rotenone in dam outflow will be detoxified using potassium permanaganate, and rotenone in the reservoir will degrade naturally over time.

3c,l. Flows downstream of the reservoir will be reduced to minimize treated water moving downstream. Briggs Creek, which flows into the Bitterroot River approximately ¼ mile below the dam will supply continuous flow to lower sections to supply acceptable minimum flows.

3d. The surface area and volume of the reservoir will be reduced to minimum allowable levels. The reservoir is normally drawn down anyway for irrigation. Levels may be elevated immediately after the project by releasing stored water from Bitterroot Lake.

PHYSICAL ENVIRONMENT (continued)

4. <u>VEGETATION</u> Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		x				
b. Alteration of a plant community?		x				
c. Adverse effects on any unique, rare, threatened, or endangered plant species?		x				
d. Reduction in acreage or productivity of any agricultural land?		x				
e. Establishment or spread of noxious weeds?		x				
f. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation Resources (Attach additional pages of narrative if needed):

PHYSICAL ENVIRONMENT

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Deterioration of critical fish or wildlife habitat?		x				
b. Changes in the diversity or abundance of game animals or bird species?			x		Yes	5b.
c. Changes in the diversity or abundance of nongame species?			x		Yes	5c.
d. Introduction of new species into an area?		x				
e. Creation of a barrier to the migration or movement of animals?		x				
f. Adverse effects on any unique, rare, threatened, or endangered species?			x		Yes	5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		x				
h. Other: _						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):
 5b, c & f. Rotenone will be lethal to game and nongame fish species. The lake will be restocked with trout the spring following treatment to re-establish a fishery. Undesirable species will be eliminated to improve conditions for game species. Invertebrates (gilled) will be reduced, but not eliminated. Invertebrate populations have rebounded quickly in past lake rehabilitations. Piscivorous birds and mammals may be affected temporarily by removal of fish, but most migratory birds will have left by late October and will not be affected. The reservoir does support a pair of bald eagles. We will stock fish as early as possible the spring following treatment or provide fish for eagles temporarily to mitigate for decreased prey.

HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		Yes	8a.
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

8a. Rotenone is applied with a petroleum carrier. Both substances are environmentally safe, degrade quickly, and are approved for use by FWP. When properly applied, rotenone is not harmful to humans.

HUMAN ENVIRONMENT

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

HUMAN ENVIRONMENT

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Have an effect upon the local or state tax base and revenues?		X				
c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Result in increased used of any energy source?		X				
e. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

*Include an attachment with a narrative explanation describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

HUMAN ENVIRONMENT

11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			x		Yes	11a.
b. Alteration of the aesthetic character of a community or neighborhood?		x				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)			x		Yes	11c.
d. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

11a & c. Rehabilitation will cause a large fish kill. Aesthetics and odor may be temporarily displeasing. We will collect fish that was ashore, others will decay naturally under the ice. The rehabilitation will occur in fall during a period of low use and result in long-term benefits to angling opportunity.

HUMAN ENVIRONMENT (continued)

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?		x				
b. Physical change that would affect unique cultural or historic values?		x				
c. Effects on existing religious or sacred uses of a site or area?		x				
d. Other: ____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):

SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		x				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		x				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		x				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		x				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		x				
f. Other: _____						

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):

PART II. ENVIRONMENTAL REVIEW (Continued)

Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

Alternatives to planned rehabilitation:

- a. No Action - continue current management and fish community composition.
- b. Rehabilitate reservoir at a later date.
- c. Use biological agent(s) such as pike to reduce abundance of undesirable fish.

The planned rehabilitation is the most acceptable option based on the current state of the fish community and fishery. Recovery potential and recreational use will be limited with other alternatives. However, alternative b will be considered if water levels in the reservoir are too high to make the project cost effective.

3. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

Hubbart Reservoir has fishing regulations under FWP authority that may be lifted prior to rehabilitation to allow removal of as many fish as possible by anglers.

4. Based on the significance criteria evaluated in this EA, is an EIS required? **NO** If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No EIS is required. Adverse impacts are short-term and can be mitigated.

5. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

Public involvement will include legal ad in local newspaper, FWP Region One News Release, State Bulletin Board, consultation with anglers, and a two week public comment period.

6. Duration of comment period if any: 14 days

7. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Fisheries Biologist Ladd Knotek
Montana Fish, Wildlife & Parks
490 N. Meridian Road
Kalispell, MT 59901
(406) 751-4542

PART III. NARRATIVE EVALUATION AND COMMENT

Hubbart Reservoir has been rehabilitated using rotenone twice before (1972 and 1988). These treatments have been successful and allowed establishment of a productive fishery for several years. We plan to repeat the treatments completed previously and include additional backwater areas at the upstream end of the reservoir. A more thorough coverage with rotenone should reduce the risk of recolonization by undesirable species.

Adverse impacts of the project will be short-term and minor, provided that bald eagle forage is maintained and downstream/instream flow and water quality standards are met.

PART IV. EA CONCLUSION SECTION

After considering potential impacts and alternatives to the proposed action, FWP recommends treatment of Hubbart Reservoir with rotenone to restore a productive trout fishery. Completion of the project is dependent on low reservoir levels in fall 1997. If conditions do not permit treatment, we will pursue the project in 1998.

